



# SEATTLE NATURAL HEALTH LLC

## CHIROPRACTIC AND NATUROPATHIC CLINIC

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### THE HEALTH BENEFITS OF FERMENTED FOODS

For thousands of years humans have fermented food using a process called lacto-fermentation. Early on, they did this not only to preserve food since there was no refrigeration, but they instinctively knew that the food would become increasingly more nutritious and digestible. Recent research shows this to be true, and many nutritional advocates now promote eating lacto-fermented foods.

Most raw foods can be fermented including fruits, vegetables, dairy and meats. The lacto-fermentation process involves bacteria called lactobacilli that break down sugars and proteins resulting in the production of lactic acid. The lactic acid deactivates the bad bacteria and allows the good bacteria to flourish, thereby preserving food for days to months. Most importantly, once the friendly bacteria, yeast and other organisms in the fermented food are ingested, the net result is our colon produces billions of good bacteria. These friendly organisms are essential to our health as the gut contains 100 trillion bacteria weighing approximately 3 to 5 pounds, or about 10 percent of the body's dry weight. In addition, between 60 and 70 percent of our immune system resides in the colon. Consuming fermented food helps prevent infection, especially to salmonella, E.coli and other pathogens.

The nutritional value of fermented foods is extremely high because it increases the amount of B vitamins such as riboflavin, thiamin and niacin. The activated form of folic acid is increased, which decreases the risk of cardiovascular disease and cancer. Choline is increased, which breaks down fat in the body and liver and helps with constipation. In addition, fermentation increases glutathione (an anti aging amino acid) and enzymes needed for digestion and detoxification.

Listed below are some fermented foods and ideas on how to incorporate them into your diet. You can buy them or make them yourself. I have listed some reputable companies that I know do a good job, but the list is by no means exhaustive, as there are other producers that also make quality fermented foods.

#### VEGETABLES

While it is true that we need to consume a lot of vegetables, traditionally many societies ate the majority of their vegetables fermented. Once food is fermented, the nutrients become more easily assimilated. The Chinese fermented cabbage to make sauerkraut 6,000 years ago. The Romans used to take barrels of sauerkraut with them to battle in order to stay healthy. Captain Cooke, the famous English explorer, took 27 barrels of sauerkraut as he sailed the world and never once developed scurvy. Almost all cultures eat fermented vegetables with meals to aid digestion. The Koreans eat Kim Chi, Latin Americans pickled carrots and garlic and the Japanese miso.

I recommend eating at least one serving of fermented vegetables a day. You can make your own, which is ideal, or buy them. Here are a few of my favorites available in stores:



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**Sauerkraut and Pickles:** Bubbies, Eden's

**Kim Chi** (a number of different producers).

**Any refrigerated sauerkraut or vegetable.** They are usually sold on the same shelf.

These products will only be found in the refrigerated section. Anything else bought on a store shelf has been pasteurized, thus neutralizing most of the health benefits. Almost all of these foods can be found at PCC, Whole Foods or most grocery stores.

### DAIRY PRODUCTS

Dairy products that have been cultured or fermented have a greater nutritional value, and are more digestible than those that have not. Like fermented vegetables, when raw milk is allowed to naturally sour the good bacteria flourish. This pushes some of the bad bacteria out, thereby preserving the milk as well as releasing many vitamins, such as B and C and minerals like calcium, magnesium and phosphorus. Another benefit is that the lactobacilli (good bacteria) in the fermented milk help breakdown the protein and casein so humans can digest it, even if they are lactose intolerant. Historically, traditional cultures would almost exclusively drink fermented milk. Bulgarians made yoghurt; Russians, Kefir (my favorite); Scandinavians, longfil; Norwegians, kjaeldermelk; Middle Easterners, laban; Indians, dahi; and the Masai of Africa, different types of cultured milk. Much of Europe consumes soured cream called crème fraîche. In addition to fermented foods, I highly recommend cheese made from raw unpasteurized milk because it retains the enzymes and increases the nutritional value.

Kefir is by far the easiest fermented product to make at home (search online or YouTube for how to make it). Raw milk that comes from grass fed cows is best. This type of milk is nutritionally superior to pasteurized milk. If making kefir is not possible, I suggest the following products which are still very healthy:

**Kefir:** Lifeway, Eden or Nancy's

**Cultured Butter:** Strauss and Nancy's

**Cultured Cottage Cheese:** Nancy's

**Cultured Sour Cream:** Nancy's

**Yogurt** with the cultures added after pasteurization: Nancy's, Stonyfield, Strauss, Mountain High

**Raw Milk:** Sea Breeze Farm's at the University or Ballard Farmers Markets, Bill the Butcher locations

**Kefir Grains:** In our office or online at [happyherbalist.com](http://happyherbalist.com)

These products can be found locally at PCC, Whole Foods, Madison Market, Metropolitan Market and some at QFC locations.

### GRAINS

Traditionally, grains were never consumed the way bread and cereals are today. Almost all grains were soaked and fermented ranging from overnight to several days. While many cultures may not have known the scientific reasoning, they understood the importance. For example, in Latin America corn was soaked for several days in lye. The Scottish would soak oats in small amounts of vinegar and Africans would soak Torro



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root, a poisonous plant to humans, for several days thereby making it edible. The Japanese would never eat soy as we do now unless it was fermented for several days making tofu, tempeh or miso.

Even bread that we eat is not the bread of 100 years ago. Almost all bread consumed today is made with only one species of yeast that makes the bread rapidly rise. Traditionally, bread was always made with sourdough, a mix of yeast and many different species of bacteria. The grain was then added and allowed to sit for hours or even days in order to rise. In this process, the bread would react with bacteria, yeasts and other organisms in the environment which dramatically increased the nutritional value. More importantly, this slow process would break down the gluten in the grain making it digestible to humans. It would also break down phytic acid, a covering around the grain that dramatically blocks the absorption of the nutrients such as zinc, calcium, iron and magnesium. A few of the side effects of eating grains that aren't fermented are allergies, malnutrition, indigestion, poor bone growth and problems with gluten that can mimic celiac disease.

Soaking or fermenting your own grain is very easy and takes very little work. Take a grain such as wheat, rye, spelt, etc. and put it in a bowl the night before you are going to use it. For example, I take one cup of oats or quinoa and add two cups of warm water and then add one tablespoon of yogurt, kefir or one teaspoon of raw apple cider vinegar to the mixture with a pinch of sea salt. I let it soak overnight at room temperature and then lightly boil it the next morning. By doing this simple procedure, you can dramatically improve the nutritional value and digestibility of the grain as well as increase the number of good bacteria.

For breads, you can make your own although some may prefer to buy bread. Below are some of my favorite sourdough breads as well as other suggestions of foods to buy that have been fermented or made with this process in mind:

**Tall Grass Bakery:** My favorites are the rye, spelt and dense rye breads. They take great pride in buying local grains when possible. Sold at Whole Foods and some Farmer's Markets.

**Wild Wheat:** Lots of selections (PCC).

**Any sourdough bread.**

**Sprouted tortillas and bread.**

**Corn tortillas that use masa** (fermented corn) as opposed to just corn.

Resources:

*Wild Fermentation: The Flavor, Nutrition, and Craft of Live-Culture Foods*, by Sandor Ellix Katz

*Nourishing Traditions*, by Sally Fallon

*Truly Cultured* by Nancy Lee Bentley

Wildfermentation.com